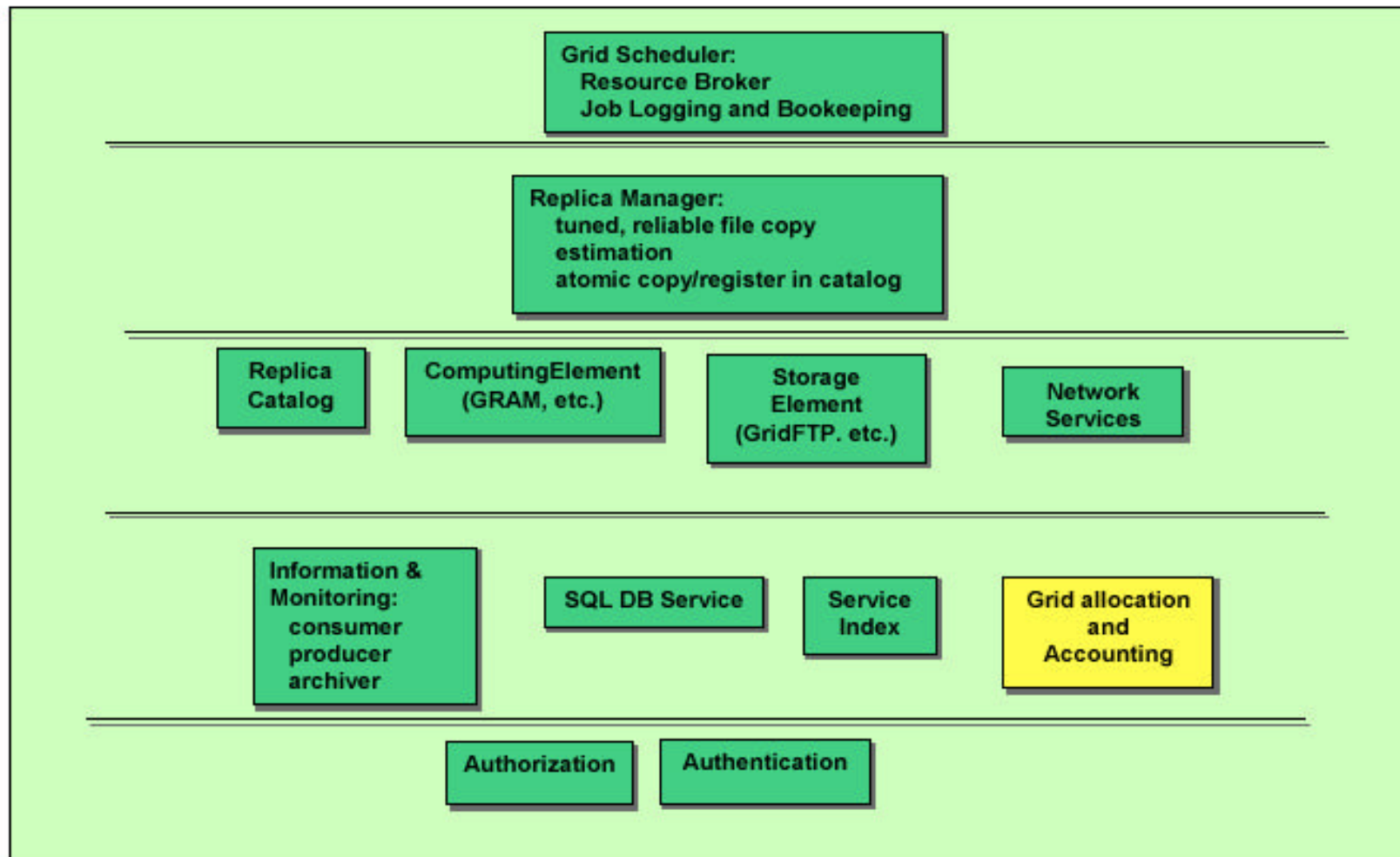


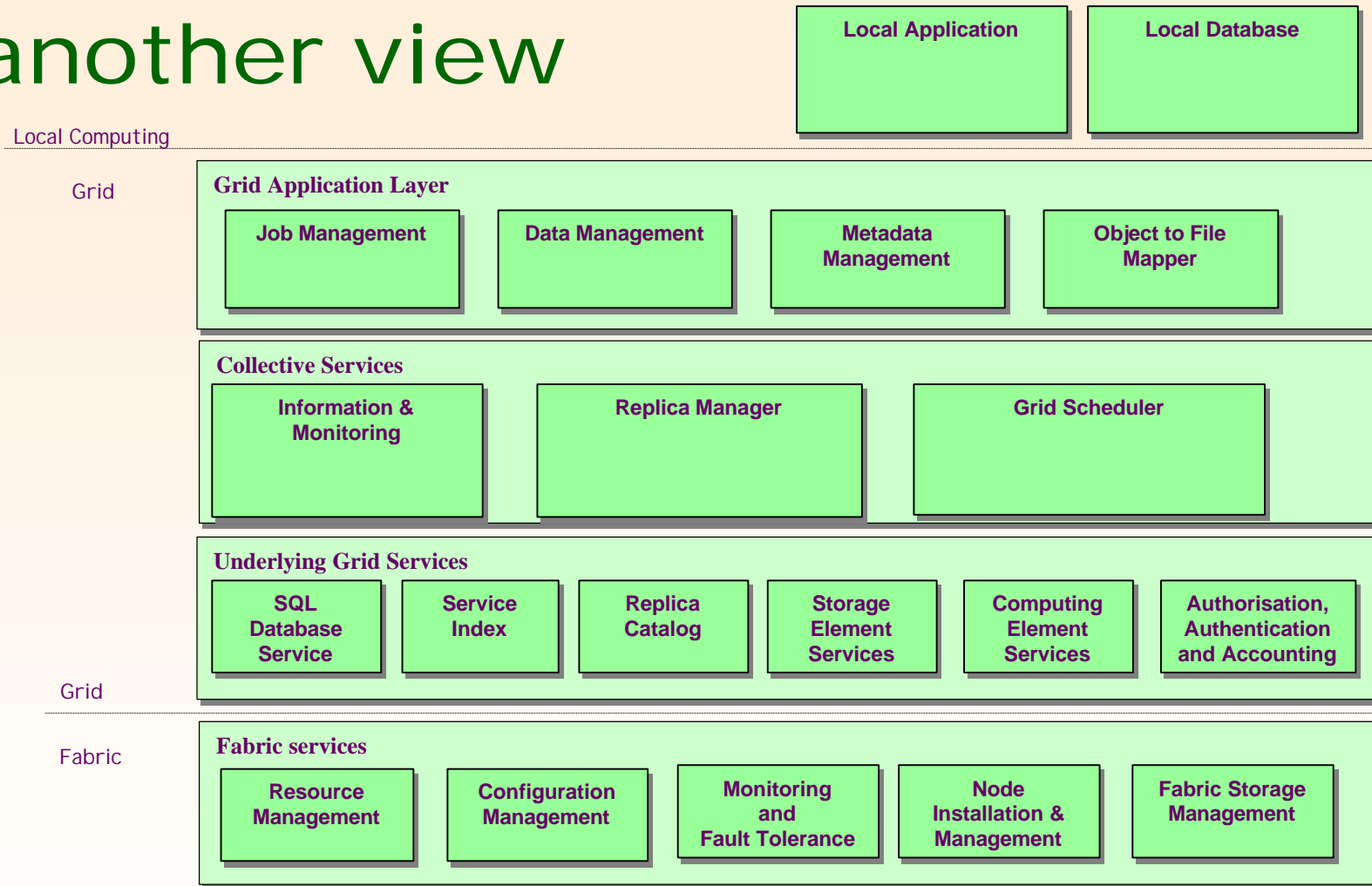
More thoughts on Architecture and Evolution

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EDG Architecture (as circulated)



EDG Architecture another view



Slightly simplified version of a WP2 diagram

Comments on the above

- First diagram:
 - “things” in each layer use only those in same layer and below
 - BUT not only immediately below
- Second diagram
 - has layers referencing BOTH ways
- It was a principle EDG defined early on that all services should be available – only restricted by policies.
 - Good
 - anyone can compose new services easily
 - Bad
 - policies are needed to keep things under control – e.g. modifying replica catalog

Layering and client server

- Recent reading reveals that layering is difficult
 - This also corresponds to observations
- Perhaps a flat set of services is better

Set of Services

- EDG Architecture has been criticised as “just a set of services”
- This may be good however
 - Provided that we demonstrate that they are sufficient
- For each EDG service we define upon what services it depends
 - IS IT ARCHITECTURE OR IMPLEMENTATION?
 - Architecture from EDG middleware standpoint
 - But implementation from a user standpoint

Services and GGF

- GGF can list useful services but **not** their dependencies – as this is implementation

Protocols

- The user can see a service as a method call
 - Blissfully unaware of the protocol
 - It might even be handled locally
- Could just use CORBA (or RMI in a Java world)
- EDG architecture group likes XML over http(s)
 - might soon prefer XML-RPC or SOAP

Service and Protocols

- A service could respond to >1 protocol
- A service could support more than one security mechanism?
- Seems good to make use of http and/or SOAP and/or CORBA and/or JINI as the basic protocols
 - Keep well away from bits and bytes
- Makes it easy to introduce new services
- We will have lots of overlapping services and we will use the ones we want

What should GPA be doing

- The protocols it should be looking at are the generic ones
- It could make sure that we have a sufficient set of services being considered by the other groups – but not at relationships between services